OPERATING MANUAL

EYETONE®

Tom O'Leary 943-4593

REPAIR – Mid Western Elec

~~836-6749~~
~~949-3671~~
~~15th & S Sheridan~~
~~1540 S. SHERIDAN~~

1521A S. SHERIDAN
HUGH HOLLY
836-6749

SUPPLIES – MID CONTINENT
SURGICAL SUPPLY
1640 E. 15th

EYETONE Model 5551 115VAC/50/60 Hz

EYETONE Model 5552 220VAC/50/60 Hz

Manufactured by
Kyoto Daiichi Kagaku Co., Ltd.,
Kyoto, Japan

AMES COMPANY
DIVISION MILES LABORATORIES
1127 MYRTLE STREET
ELKHART, INDIANA 46514

Copyright December, 1973

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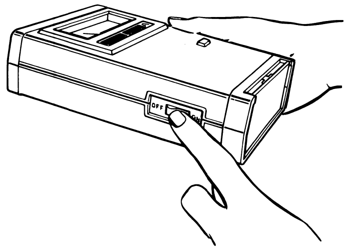
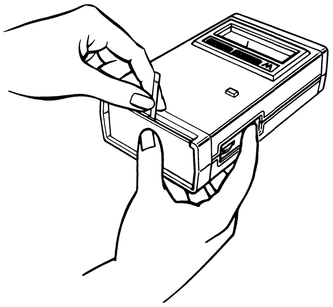
PROCEDURAL SYNOPSIS FOR EYETONE™/DEXTROSTIX® SYSTEM

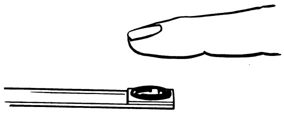
NOTE: Refer to Section 3
for complete written operational procedures.



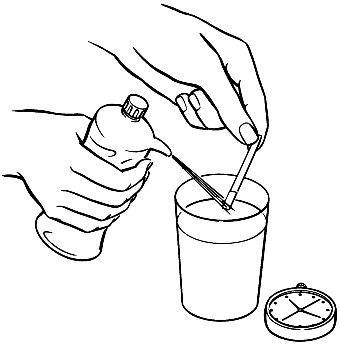
1. Turn instrument "ON."



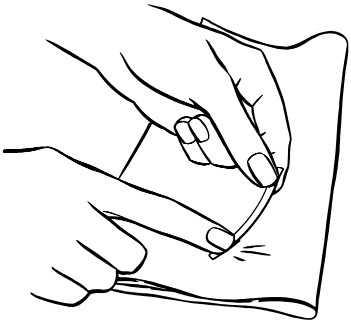
2. Standardize with Reference Strips identified as SET 1 and SET 2 with thumbwheel.



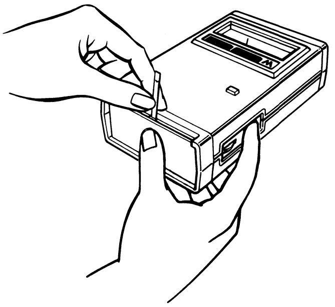
3. Place large drop of blood on DEXTROSTIX, covering entire reagent area. Allow to remain exactly 1 minute.



4. Quickly wash off blood.



5. Blot on absorbent tissue.



6. Insert strip in EYETONE and read.

SYNOPSIS OF EYETONE™ OPERATION

USE OR FUNCTION.

EYETONE™ is a portable instrument designed to quantitatively measure whole blood glucose when used in conjunction with DEXTROSTIX® Reagent Strips.

INSTALLATION PROCEDURES AND SPECIAL REQUIREMENTS.

EYETONE requires an electrical power source with voltage matching that identified on the individual instrument's adaptor attached to the electrical cord (110V in the U.S.A.).

PRINCIPLES OF OPERATION.

EYETONE measures the reflected light from the surface of the reacted reagent area of DEXTROSTIX and converts this measurement, by means of electronic circuitry, to a reading on a precisely calibrated meter scale on the instrument capable of indicating blood glucose within the range of 10-400 mg/100 ml. The higher the blood glucose level, the darker the strip and less light reflected. Conversely, the lower the blood glucose level, the lighter the strip and more light reflected.

PERFORMANCE CHARACTERISTICS AND SPECIFICATIONS.

EYETONE will measure whole blood glucose levels with DEXTROSTIX Reagent Strips within the range of 10-400 mg/100 ml.

OPERATING INSTRUCTIONS.

The operating instructions detailed, with illustrations, in Section 3 of this manual are two-fold in nature. The Standardization Procedure indicates steps to be taken to set the meter scale prior to performing glucose determinations with DEXTROSTIX Reagent Strips. The Blood Glucose Determination Procedure, including the DEXTROSTIX Reagent Strip blood specimen preparation technique, follows the standardization procedure. To obtain good results with both elements of the procedure, exact timing, proper wash technique and frequent standardization must be followed.

STANDARDIZATION PROCEDURES INCLUDING MATERIALS AND/OR EQUIPMENT TO BE USED.

EYETONE Standardization components consist of Reference Strips — SET 1 and SET 2. An Initial Standardization adjustment is required when the instrument is first put into use (see Section 2). During normal operation only frequent standardization checks are required following a 30-minute warm-up period (see Section 3). All Standardization components required for the instrument are supplied in the Standardization Kit.

OPERATIONAL PRECAUTIONS AND LIMITATIONS.

The glucose reaction of DEXTROSTIX reagent system may be inhibited if fluoride preservatives have been used in the blood from which the specimen is taken.

Care should be taken to avoid exposure of both the Reference Strips and DEXTROSTIX Reagent Strips to excess heat and/or humidity.

Proper handling of whole blood specimens must be observed to prevent glycolysis.

HAZARDS.

EYETONE presents no electrical or chemical hazards to the user. However, the instrument is NOT explosion-proof and must not be used in pure oxygen environments.

SERVICE AND MAINTENANCE INFORMATION.

The entire second part of this manual outlines in detail directions for daily maintenance and a troubleshooting chart for problems that may be encountered. If an operator is unable to restore the instrument to working order or has a question regarding maintenance of the EYETONE, the area Ames Authorized Service Agency should be contacted. See Section VI of this manual for further details.

PART I.

OPERATION

Section 1

INTRODUCTION

This OPERATING MANUAL is designed to provide detailed operating information on the AMES EYETONE™ Reflectance Colorimeter. The pages are punched to fit the special three-ring binder which will easily allow for any changes or additions to the manual content in the future. The pages and figures are numbered by section to simplify the use of the manual. Procedures are presented in a step-by-step manner.

EYETONE offers the efficiency and convenience of performing blood glucose determinations in the physician's office, at the patient's bedside*, in the hospital out-patient department or in any location used for diabetic screening.

EYETONE utilizes an electro-optical system for measuring the degree of color development on DEXTROSTIX® Reagent Strips in reaction to a drop of whole blood. The amount of light reflected from the reacted reagent area of DEXTROSTIX is measured and a direct readout of blood glucose concentration is provided on the Meter Scale of the instrument.

The ease of operation and convenience of DEXTROSTIX/ EYETONE System allows the clinician to take advantage of prompt definition of blood glucose concentration. Use of this System minimizes the time required for specimen transport and data transmission.

Blood glucose concentration is a constantly changing value. In certain situations, it may increase or decrease by more than 100 mg/100 ml in less than one hour. DEXTROSTIX/EYETONE System can provide information about the patient's blood glucose level rapidly and conveniently.

*THE INSTRUMENT IS NOT EXPLOSION-PROOF — DO NOT USE IN PURE OXYGEN ENVIRONMENT.

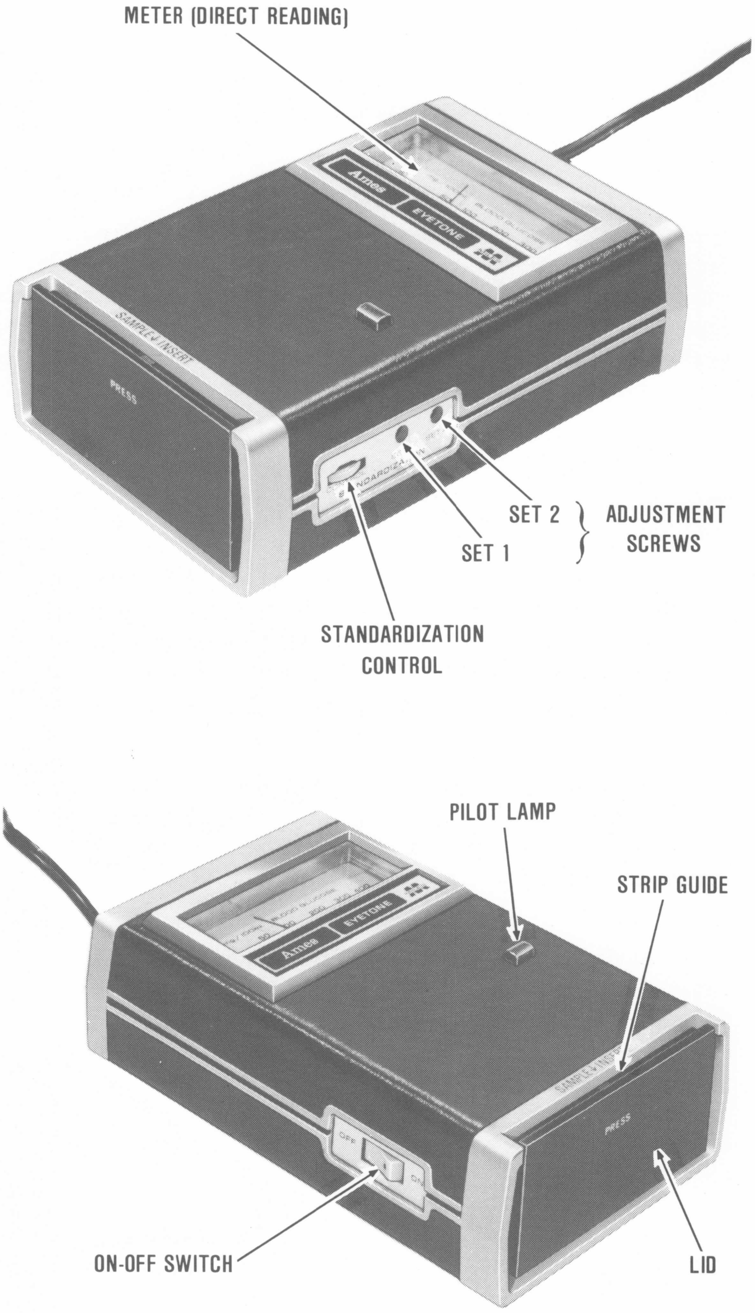


Figure 1-1

EYETONE

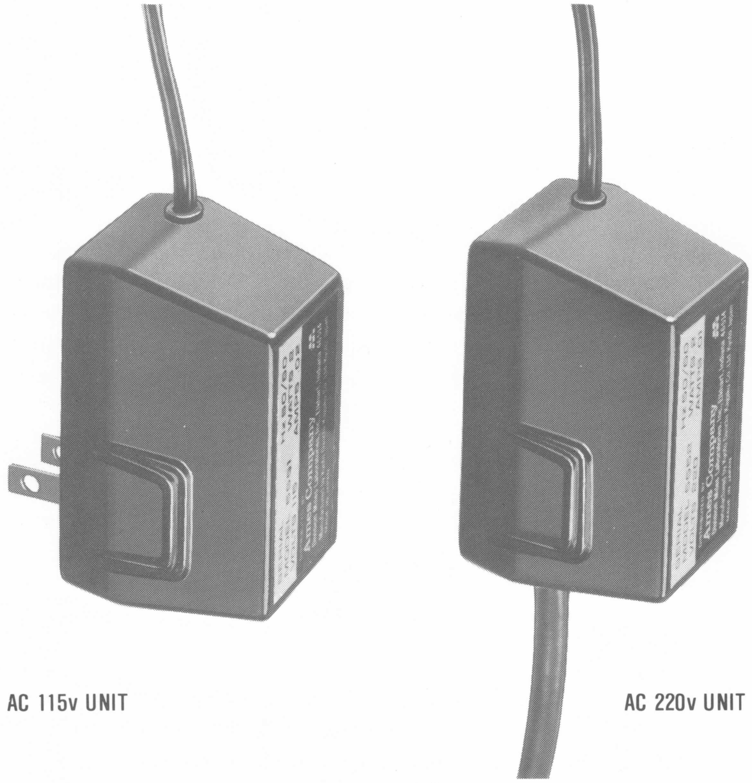
Description

EYETONE™ is a lightweight, compact and portable instrument which will quantitatively measure the whole blood glucose when used in conjunction with DEXTROSTIX® Reagent Strips. Reference Strips are supplied with the instrument when it is originally purchased. Reference Strips are used for the Standardization Procedure.

The ON-OFF Switch is located on the left side of the instrument. The Thumbwheel Standardization Control, located on the right side of the instrument, is used to perform "Instrument Standardization" during normal operation (see Section 3). The Standardization Adjustments — SET 1 and SET 2, also located on the right side, are used to perform an "Initial Standardization Adjustment" (see Section 2).

The Meter Scale on the instrument enables one to measure whole blood glucose within the range of 10-400 mg/100 ml. When pressed, the Lid of the instrument activates a microswitch which activates the electronic circuitry. **The instrument Model and Serial Numbers are found on the identification plate attached to the AC Adaptor.**

EYETONE 5551 is supplied with an AC 115V Adaptor attached to the electrical cord. Likewise, EYETONE 5552 is supplied with an AC 220V Adaptor attached to the electrical cord. Since the AC Adaptor contains a power transformer and rectifier, DC voltage is therefore applied to instrument. Weight of Adaptor is 0.2 Kg (0.44 pound).



AC 115v UNIT

AC 220v UNIT

Figure 1-2

AC ADAPTOR

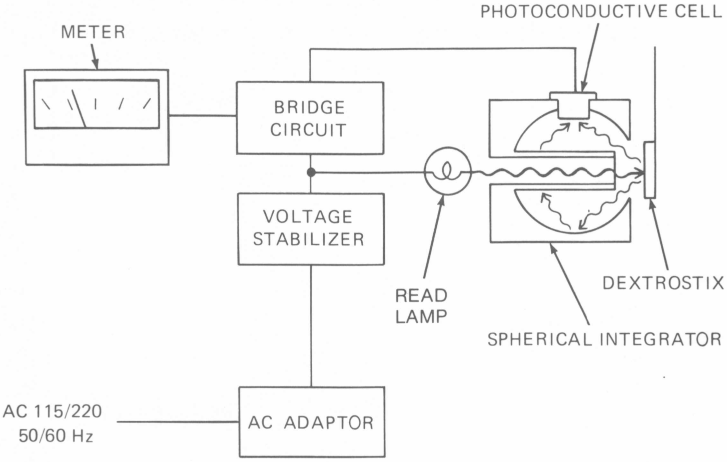


Figure 1-3

OPERATIONAL BLOCK DIAGRAM

Principles of Operation

EYETONE measures the reflected light from the surface of the reacted reagent area of DEXTROSTIX and converts this measurement, by means of electronic circuitry, to a reading on a precisely calibrated Meter Scale. A simplified block diagram is shown in Figure 1-3.

The light emitted by the lamp passes along a light guide through a color filter aperture and illuminates the reagent area of DEXTROSTIX. The reflected light, which is a function of the color density, is averaged by means of the Spherical Integrator; and the voltage supplied to. the photo-conductive cell and the lamp is stabilized by the Voltage Stabilizer. The higher the blood glucose level, the darker the strip and less light reflected. Conversely, the lower the blood glucose level, the lighter the strip and more light reflected.

Specifications

Function:	Whole blood glucose determinations when used in conjunction with DEXTROSTIX® Reagent Strips.
Range:	10 mg/100 ml-400 mg/100 ml for whole blood glucose.
Precision:	± 5 mg/100 ml in the range of 10 mg/100 ml to 250 mg/100 ml. ± 10 mg/100 ml in the range of 250 mg/100 ml to 400 mg/100 ml. (NOTE: Precision for a stabilized instrument)
Electrical:	115VAC/50/60 Hz Model 5551 220VAC/50/60 Hz Model 5552
Power Dissipation:	Less than 3 watts per determination.
Lamp Life:	10,000 hours.
Dimensions:	180 mm x 110 mm x 50 mm (approximately 7-1/4 in. x 4-1/4 in. x 2 in.).
Weight:	Approximately 1.2 Kg (approximately 2-3/4 pounds).

EYETONE meets all N.F.P.A. (National Fire Protection Association) safety standards and Occupational Safety and Health Act standards as set forth in the Department of Labor FEDERAL REGISTER, Volume 36, Number 105, Part II, dated Saturday, May 29, 1971.

INSTALLATION

Preparing For Operation

1. Once the unit is unpacked, lay it flat on its back on a level surface.
2. **Open lid and remove packing piece between strip guide and photocell window.** (See Figure 2-1.)
3. Plug the instrument AC adaptor in an AC electrical outlet and place the ON-OFF Switch in *"on"* position.
4. Check Pilot Lamp (Figure 1-1) and Read Lamp (through optical window — Figure 2-1) for illumination.
5. Allow the instrument to stabilize for 30 minutes and then perform initial standardization adjustment.

Initial Standardization Adjustment

NOTE: In the future, this procedure will only be necessary on periodic occasions to compensate for component aging from long term use or when the instrument has not been in use for a period of time.

1. With ON/OFF Switch turned *"on,"* insert Reference Strip SET 1 into the Strip Guide with colored area toward meter scale. Push strip until it reaches the strip stop — do not force (see Figure 2-2).
2. Adjust Standardization Control on right side of instrument (see Figure 1-1) so the white mark is in the middle of the visible area.
3. Press lid in center (see Figure 2-2) and, using screwdriver supplied, turn SET 1 adjustment screw on right side of instrument (see Figure 1-1) until meter needle stops at position SET 1 on the meter scale.

   CAUTION: The SET 1 and SET 2 adjustment slots are made from nylon. Care must be taken when inserting screwdriver to prevent damage. Use screwdriver supplied with standardization component kit. DO NOT FORCE the adjustments.

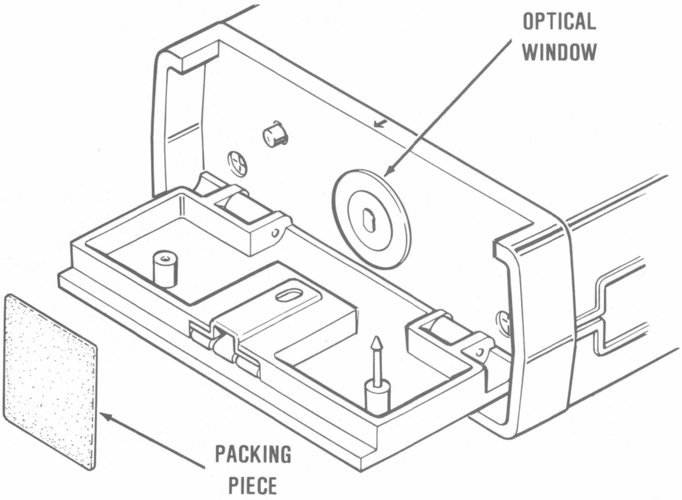


Figure 2-1

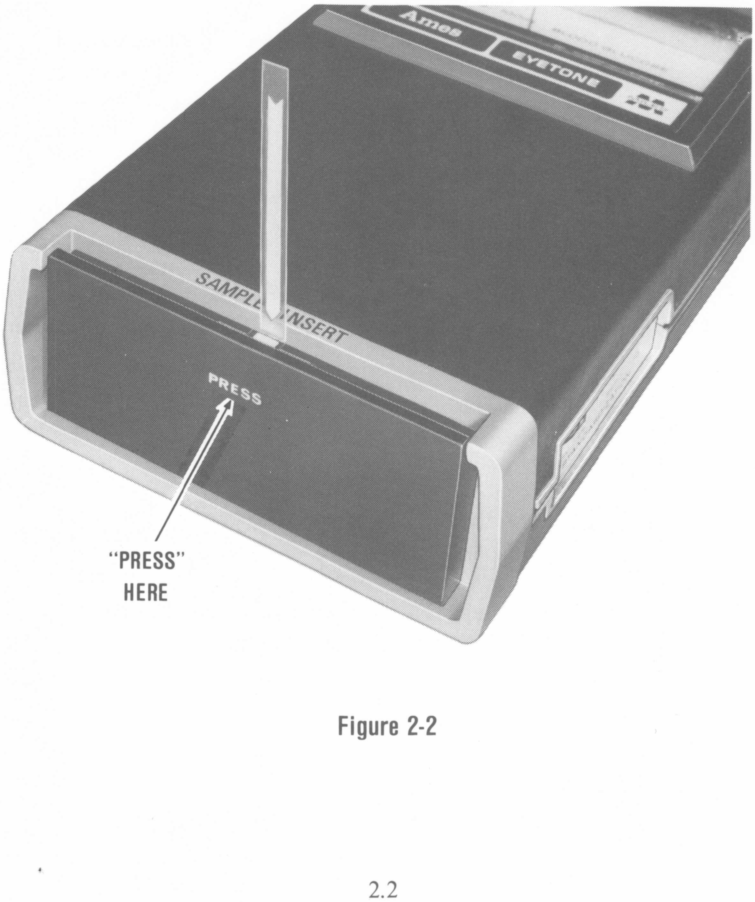


Figure 2-2

4. Replace Reference Strip SET 1 with Reference Strip SET 2.
5. Press lid in center and, using screwdriver supplied, turn SET 2 adjustment screw on right side of instrument (see Figure 1-1) until meter needle stops at position SET 2 on the meter scale.
6. Repeat steps 3, 4 and 5 until the needle stops precisely on both SET 1 and SET 2 positions without further adjustment.
7. Instrument is now ready for use.

OPERATING INSTRUCTIONS

Introduction

It is quite important to properly standardize and calibrate the EYETONE®/DEXTROSTIX® system before performing blood glucose determination procedures. Two sequential procedures requiring only a series of simple functions have been developed to completely prepare the EYETONE/DEXTROSTIX system for proper performance.

The Instrument Set Procedure (i.e. Standardization) is designed to standardize the electronics and to prepare the EYETONE for the calibration and blood glucose determination procedures. The EYETONE/DEXTROSTIX Calibration Procedure is used as a final procedure to calibrate the total EYETONE/DEXTROSTIX system.

After the Initial Standardization Adjustment (see page 2.1 of this manual) has been completed during installation, the following Instrument Set and EYETONE/DEXTROSTIX Calibration Procedures should be performed before proceeding to the Blood Glucose Determination Procedure.

NOTE: Since the electrical current used by the instrument is small, the ON-OFF Switch may be left in the "ON" position at all times. This will allow the instrument to remain stabilized and eliminates the required 30-minute warm-up period. *If at any time EYETONE is turned "off", the instrument must be reset and recalibrated before performing blood glucose determinations.*

Instrument Set Procedure (i.e. Standardization)

The instrument standardization components are supplied in kit form and include the following (see Figure 3-1):

- Container, with label instructions
- Screwdriver
- Reference Strips — SET 1 (3 each)
- Reference Strips — SET 2 (3 each)

The initial supply of six (6) Reference Strips (3 of SET 1 and 3 of SET 2) and one screwdriver should be sufficient for a long period of time. Additional bottles of SET 1 and SET 2 Reference Strips and screwdriver are available for purchase from authorized Ames Company Dealers (see Section 6 for more information).

CAUTION: Keep Reference Strips clean and dry. Avoid scratching or marring of color surface. Discard strip if soiled or mutilated. Keep remaining strips in bottle separated from screwdriver by cardboard partition.

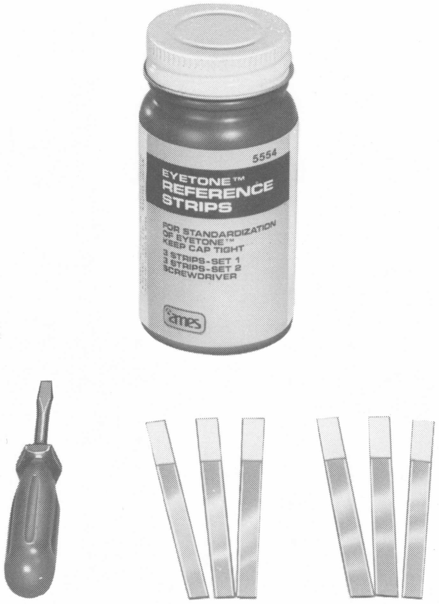


Figure 3-1

STANDARDIZATION KIT COMPONENTS
(for Instrument Set Procedure)

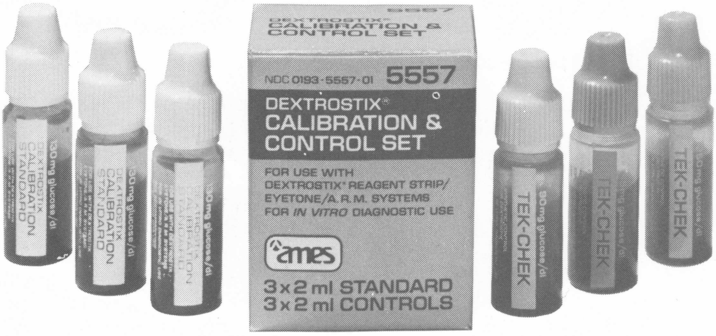


Figure 3-2

DEXTROSTIX CALIBRATION AND CONTROL SET COMPONENTS
(for Calibration Procedure)

To perform the Instrument Set Procedure for EYETONE, proceed as follows:

1. With ON/OFF Switch turned "on", insert Reference Strip SET 1 into the Strip Guide with colored area toward meter scale. Push strip until it reaches the strip stop — do not force. (see Figure 3-3, Step 2).
2. Press lid in center and adjust meter needle to position SET 1 on the meter scale by moving the Thumbwheel Standardization Control.
3. Replace Reference Strip SET 1 with Reference Strip SET 2.
4. Press lid in center and if meter needle stops at position SET 2 on the meter scale, the Instrument Standardization Procedure is completed. If the meter needle does not stop at position SET 2, refer to TROUBLESHOOTING Section 5 — Standardization Difficulty.

EYETONE/DEXTROSTIX Calibration Procedure

The following calibration procedure is strongly recommended by Ames Company when performing blood glucose determinations with the EYETONE/DEXTROSTIX system.

NOTE: In the event that the DEXTROSTIX Calibration Standard is not available for immediate use, clinically meaningful results can still be obtained using the Instrument Set Procedure found on page 3.1. It should be noted, however, that use of the Instrument Set Procedure alone might not produce blood glucose values as accurately as when the EYETONE/DEXTROSTIX Calibration Procedure is also used.

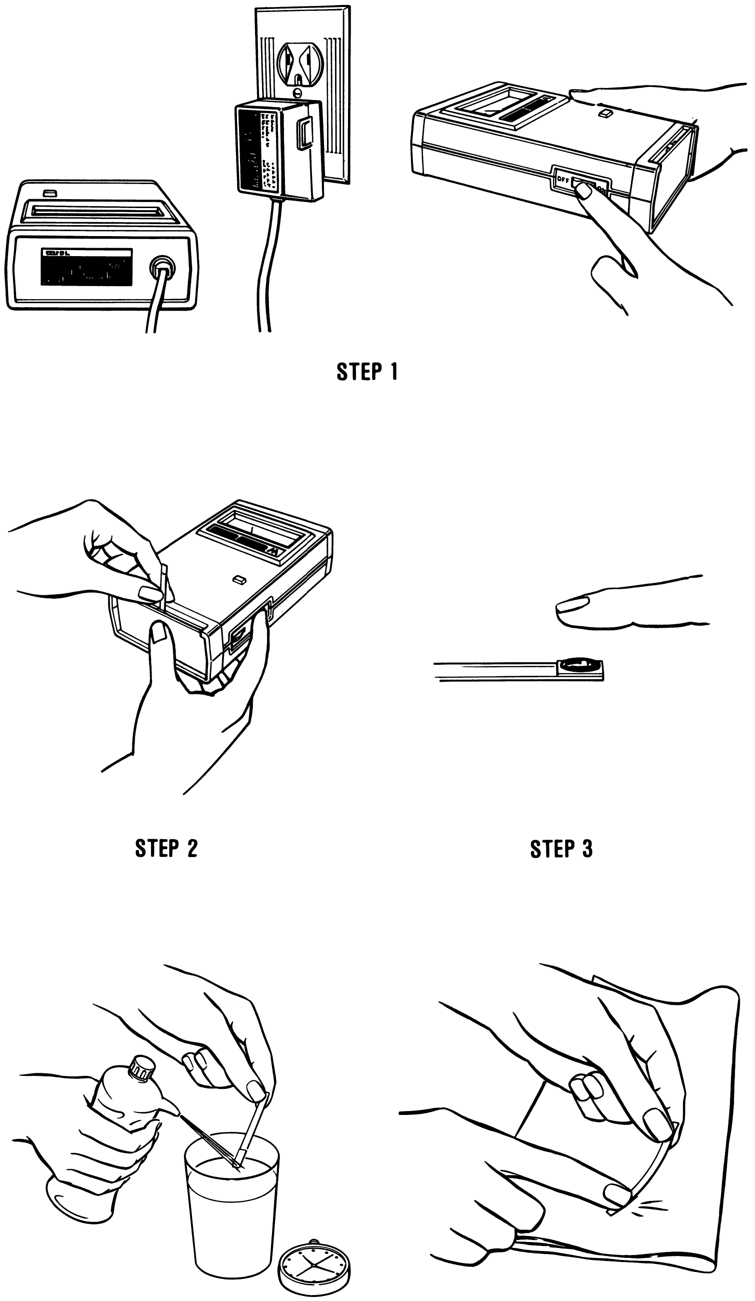
The calibration procedure, when used in addition to the Instrument Standardization Procedure, is intended to match individual batches of DEXTROSTIX with EYETONE and to compensate for any bias resulting from systematic variations in user technique. Once the EYETONE has been calibrated, the TEK-CHEK® Control Solutions are used to verify that the total system is performing accurately.

NOTE: Additional information concerning the TEK-CHEK Control Solutions can be found in the DEXTROSTIX Calibration and Control Set product insert.

The DEXTROSTIX Calibration and Control components are supplied in kit form and include the following (see Figure 3-2):

- Carton, with product insert
- Calibration Standard (130 mg glucose/dl — 3 x 2 ml), made gravimetrically
- TEK-CHEK Control Solutions (45, 90 and 250 mg glucose/dl), made gravimetrically

The DEXTROSTIX Calibration and Control Set kits are available for purchase from authorized Ames Company Dealers (see Section 6 for more information).



STEP 1

STEP 2

STEP 3

STEP 4

STEP 5

Figure 3-3

Steps 1-5 for EYETONE Calibration and
Blood Glucose Determination Procedures

To perform the final EYETONE/DEXTROSTIX Calibration Procedure, proceed as follows:

1. Lay instrument flat on its back on a level surface.
2. If instrument has been standardized according to the Instrument Standardization Procedure found on page 3.1, proceed to Step 3. If instrument has just been turned "on", allow EYETONE to warm up for 30 minutes and then perform the Instrument Standardization Procedure (page 3.1) before proceeding to Step 3.

NOTE: As with all tests, reliable results with DEXTROSTIX depend on good technique. Therefore, the directions for use of DEXTROSTIX and the DEXTROSTIX Calibration Standard or Controls must be followed exactly as stated below.

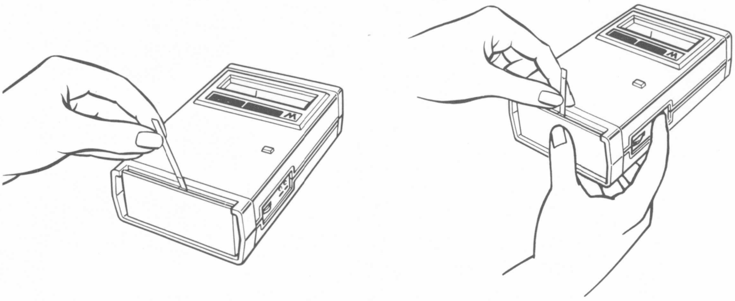
3. Freely apply a large drop of the 130 mg glucose/dl DEXTROSTIX Calibration Standard sufficient to *cover entire* reagent area of a DEXTROSTIX Reagent Strip.

CAUTION: Mix the Calibration Standard by shaking the vial vigorously several times before use.

4. Wait *exactly* 60 seconds (must use sweep second hand or stop watch for timing). Keep DEXTROSTIX in horizontal position to avoid the Calibration Standard from running off of the reagent area.
5. Quickly wash off Calibration Standard (in 1 or 2 seconds) with a sharp stream of water, using a wash bottle (refer to figure 3-3, Step 4).
6. Blot the reagent area of the strip on lint-free, absorbent tissue (refer to figure 3-3, Step 5).
7. Insert the reagent strip into Strip Guide with the colored area toward the Meter Scale and quickly (within 2-3 seconds) press the Lid firmly, with a finger on the word "PRESS", and verify that the dial is reading between 91-169 mg/dl (refer to Figure 3-4, Steps 6 and 7). Proceed immediately to Step 8 below.
8. If the dial reading is between 91-169 mg/dl, immediately adjust the meter needle while the reacted DEXTROSTIX is still in place, to 130 mg/dl, using the Thumbwheel Control on the side of the instrument.

CAUTION: If the initial reading with the 130 mg/dl Calibration Standard falls outside of the 91-169 mg/dl range, the following sources of error may have occurred:

1. **Improper technique (too little Calibration Standard on reagent area, inaccurate timing, improper washing, delay in reading, etc.). Repeat Calibration Procedure carefully. If result still falls outside of 91-169 mg/dl range, proceed to item 2.**
2. **Reagent deterioration due to exposure of DEXTROSTIX Reagent Strips to light, ambient moisture or heat. Obtain a fresh bottle of DEXTROSTIX and repeat Calibration Procedure. If fresh DEXTROSTIX Reagent Strip fails to fall within the specified range, proceed to item 3.**



STEP 6

STEP 7

Figure 3-4

Steps 6-7 for EYETONE Calibration and
Blood Glucose Determination Procedures

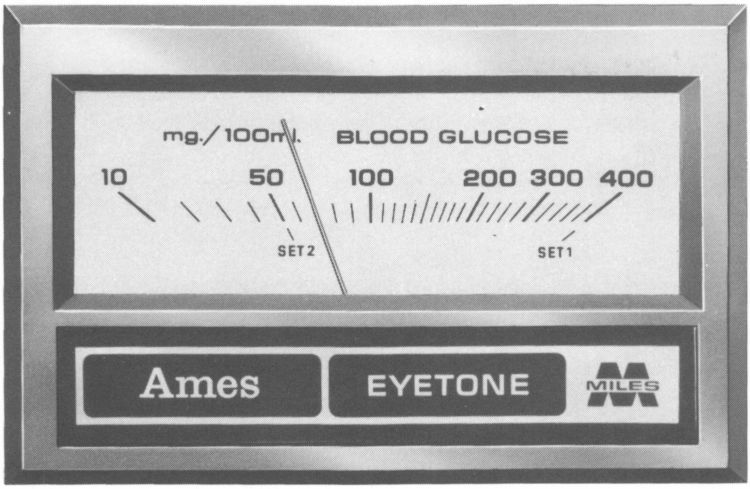


Figure 3-5

EYETONE Meter Scale

3. **Instrument malfunction or operator error when using EYETONE. If instrument malfunction is suspected, contact your authorized Ames Service Agency or contact Ames Customer Service Department (219-264-8901) for further assistance.**

9. Calibration of the EYETONE/DEXTROSTIX system is now complete.

NOTE: Calibration of the EYETONE/DEXTROSTIX system should be performed under the following conditions:
  a. Immediately after performing the Instrument Standardization Procedure.
  b. After 30 minutes to one hour of continuous use.
  c. When using a new bottle of DEXTROSTIX.
  d. When changing instrument operators.

Blood Glucose Determination Procedure

When the instrument is used to perform a series of determinations, the Strip Guide should be cleaned before performing the first determination and periodically thereafter. (Refer to "Cleaning" under "GENERAL MAINTENANCE", Section 4).

IMPORTANT NOTE: When blood glucose determinations are being performed at irregular intervals, it is good routine to perform the Instrument Set and EYETONE/DEXTROSTIX Calibration Procedures before proceeding.

To perform blood glucose determinations on EYETONE, proceed as follows:

(Refer to Figure 3-3 for the following steps)

1. Lay instrument flat on its back on a level surface.
2. Turn ON-OFF Switch "on" if not previously done.
   NOTE: Instrument must warm up for 30 minutes before use.
3. Perform Instrument Set Procedure and EYETONE/DEXTROSTIX Calibration Procedure if not previously done.
4. Freely apply a large drop of capillary or venous blood on DEXTROSTIX sufficient to cover entire reagent area. Wait exactly 60 seconds (must use sweep second hand or stopwatch for timing). Keep DEXTROSTIX Reagent Strip in a horizontal position to avoid spilling blood from the reagent area.
5. Quickly wash off the blood (in 1 or 2 seconds) with a sharp stream of water, using a wash bottle.
6. Blot the reagent area of the strip on lint-free absorbent tissue.

(Refer to Figure 3-4 for the following steps)

7. Insert the reagent strip into the Strip Guide with the colored area toward the meter scale. Push the strip in until it reaches the Stop — do not force.
8. Press center of Lid firmly, with finger on the word "PRESS". Observe meter needle and record the whole blood glucose value (Figure 3-5).
9. Release Lid and remove Strip from instrument.
   NOTE: Occasionally open the Lid completely and clean the glass window of the aperture with a soft cloth to remove accumulated residue.

PART II.

MAINTENANCE

GENERAL MAINTENANCE

EYETONE™ is a precision electro-optical device and must be handled with care. Rough handling or dropping of the instrument will produce severe mechanical shocks which can disturb internal calibrations and/or cause malfunctions. As with all sensitive electronic instruments, prolonged exposure to excessive humidity and temperature extremes should be avoided.

Cleaning

1. After extended periods of use, the strip guide, spring, and optical window into which the DEXTROSTIX is placed for readings may accumulate material to the extent that insertion becomes difficult. If this should occur, the strip guide and guide spring may be removed to expose the optical window for cleaning, using the following procedure:
    a. Open the lid completely by pulling it forward until the latch releases.
    b. Remove strip guide and guide spring by pulling them forward from channel. See Figure 4-1.

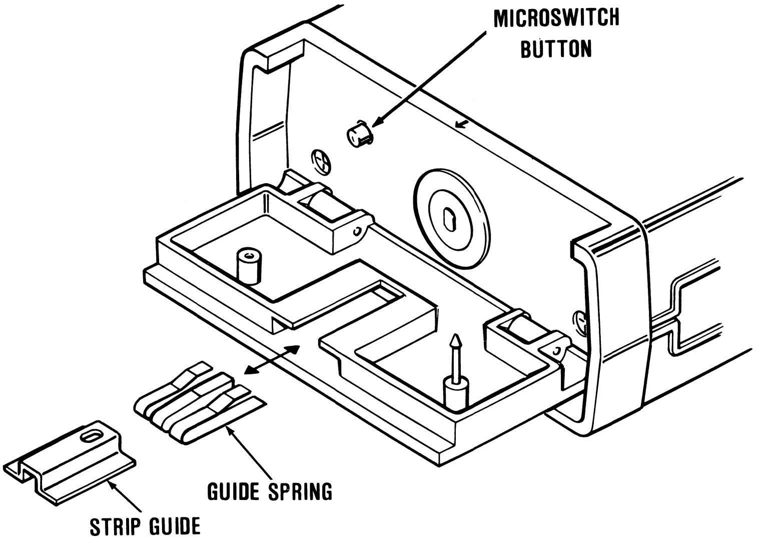


Figure 4-1

REMOVING STRIP GUIDE AND GUIDE SPRING FOR CLEANING

c. Clean the strip guide and guide spring with either water and/or a mild detergent and a soft brush. Dry completely.

NOTE: Do not scratch aperture in strip guide. Excessive scratches will create errors in the sample reading.

d. Clean accumulated materials from channel in lid using a soft, blunt edged object. Do not use knife, etc.

e. Clean the optical window with alcohol and lint-free cloth. Do not press hard on optical window, as it is made of thin glass.

2. Insert guide spring in lid channel with open end of spring toward rear. Slide strip guide over spring and into channel with aperture in strip guide to rear, so that it will line up with optical window.

CAUTION: Close attention must be made to insure proper orientation of spring and guide. If guide is inverted the strip will not be read. Replace the spring or guide if either are scratched, bent or broken. See Replacement Parts Section 6.

Section 5

TROUBLESHOOTING

While performing blood glucose determinations, certain minor problems as indicated in the following chart may occur. Rectifying the probable cause should eliminate the problem. If problem persists, refer to "Service" Section 6.

Blood Chemistry Chart

TROUBLE	PROBABLE CAUSE
DEXTROSTIX value too low	• Fluoride in blood as preservative. • Excess washing of reagent strip. • Failure to allow reaction to proceed for one minute. • Thin film of blood; inadequate amount of blood used to sufficiently cover entire reagent area. • Error in reference method. NOTE: DEXTROSTIX is designed to give reliable results with the whole blood. It should be noted that these results are generally lower than values obtained with other methods utilizing plasma or serum. • Glycolysis in sample used. • Reference method involves total reducing substance. • Exposure of reagent strips to excess heat and/or humidity. • Instrument not properly standardized.

Blood Chemistry Chart — Continued

TROUBLE	PROBABLE CAUSE
DEXTROSTIX values too high	• Excess of time of exposure of blood to strip (over one minute). • Glycolysis in blood used for reference method. • Use of plasma rather than whole blood on DEXTROSTIX. • Instrument not properly standardized. • Error in reference method. • Strip Guide scratched.
No color development	• Exposure of reagent strip to excess heat and/or humidity.
Reading constant	• Check for improperly installed Strip Guide. • Strip Guide dirty.

Instrument Troubleshooting Chart

Trouble	Probable Cause	Remedy
Strip will not fit into Strip Guide	1. Strip Guide dirty.	1. Clean Strip Guide. See CLEANING Section 4.
	2. Reagent strip too large.	2. Use proper size reagent strips.
Instability of Meter Indication	AC line supply voltage lower than required operating voltage.	
Instrument operation error	1. Instrument not turned *"on."*	1. ON/OFF Switch must be *"on."*
	2. Lid not pressed down firmly at center.	2. Press Lid firmly on word "PRESS."
	3. Reagent strip not fully inserted in Strip Guide.	3. Push the strip into the Strip Guide until it reaches the Stop — do not force.
Intermittent operation when "PRESSING" lid.	1. Micro switch adjustment.	1. Contact Service Agency.
	2. Lid incorrectly *"pressed."*	2. Pressure must be applied to Lid center on word "PRESS."

Instrument Troubleshooting Chart — Continued

Trouble	Probable Cause	Remedy
Standardization difficulty	1. Optical window dirty.	1. See Cleaning — Section 4.
	2. Deformation of guide spring.	2. Obtain new guide spring.
	3. Strip guide dirty.	3. See Cleaning — Section 4.
	4. Deformation or discoloration of reference strip.	4. Obtain new reference strips.
	5. Strip guide improperly positioned.	5. See Cleaning — Section 4.
	6. SET 1 or SET 2 cannot be obtained with Thumb Wheel Standardization Control.	6. Perform Initial Standardization Adjustment, page 2.1.
	7. SET 1 and SET 2 cannot be obtained with SET 1 or SET 2 Adjusting Screws.	7. Contact Service Agency.
Standardization instability (Needle jumps)	Loose component within spherical integrator.	Contact Service Agency.
Instrument will not turn *"on"*	Electrical defect.	Contact Service Agency.

Section 6

SERVICE AND REPLACEMENT PARTS

Should problems arise during EYETONE® operation, first refer to Section 5 Troubleshooting. Avoid erroneous instrument results by following proper instrument procedures. If the problem cannot be resolved and an instrument defect is apparent, contact your authorized Ames EYETONE Dealer for the name and address of the area Ames Authorized Service Agency.

Authorized Ames Service Agency:

Name ____

Address ____

____

Phone ____

TOLL FREE
TO CUSTOMER SERVICE
800-348-8100

If the problem centers on DEXTROSTIX® or procedure techniques, contact the Ames Customer Service Department, Telephone 219/264-8901 or write: Ames Customer Service Department, Ames Company, Div. Miles Laboratories, Inc., Elkhart, Indiana 46514.

REPLACEMENT ITEMS

Catalog No.	Description
5555	Reference Strips (1 Bottle)
5557	DEXTROSTIX Calibration and Control Set

The above items are available from the authorized Ames EYETONE Dealer in your area.

REPLACEMENT PARTS

Part No.	Description
H3745170	Strip Guide
H3745180	Spring, Strip Guide
P0555110	Operating Manual — EYETONE

The above replacement parts are available through your authorized Ames Service Agency or directly from Ames Customer Service Department, Ames Company, Div. Miles Laboratories, Inc., Elkhart, Indiana 46514.